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Spot and Speckle Motion in SSD Illumination

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We present analytic and computer results on laser spot motion due to SSD, at and below critical dispersion, and during "beam fill". Within the spot, we contrast time domain and frequency domain views of speckle structure, motion and lifetime. The results are of interest regarding laser-plasma phenomena that evolve on a time scale that is very short compared to the period of the frequency modulation.

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